

REMARKS

Claims 1, 21, 26 and 29 have been amended. Claims 1, 2, 4, 6 and 21 to 33 are retained of which claim 23 has been allowed and claim 31 has been indicated to be allowable. Claims 7 to 20 were allowed in the parent application.

Claims 1, 2 and 26 were rejected under 35 U.S.C. 102(b) as being anticipated by Laakso et al. (U.S. 4,650,545). The rejection is respectfully traversed.

Claim 1 requires, among other features, a discontinuously movable substantially planar film. No such feature is taught or suggested by Laakso et al. It is respectfully submitted that the portion of Laasko et al. cited, namely column 2, lines 23-24 have nothing whatsoever to do with this feature. Furthermore, the term “periodic” as it may pertain to wirefilms on a single sheet can deal with the placement of the wirefilms on the sheet and not with movement of the films. Note in Fig. 3 of Laakso et al. that there are six interconnectors which are equally spaced apart on the drawing and this equal spacing can be said to be “periodic”, but it has nothing to do with movement.

Claim 1 further requires a plurality of spaced apart groups of wire strands, each group extending generally outwardly from a central region in a non-overlapping different direction, each wire strand having a first end and an opposing second end, the first end of each wire strand operable to contact a first bonding site and the second end of each wire strand operable to contact a second bonding site to electrically interconnect the first component and the second component, each wire strand between the first end and the second end being substantially fully embedded in the film. No such feature is taught or suggested by Laakso et al. either alone or in the combination as claimed. It should be noted that the process of Laakso et al. is incapable of fully embedding the conductors in

the polyimide layer 14 whereas this feature is fully contemplated by the subject disclosure in the paragraph bridging pages 7 and 8 and claimed.

Claim 2 depends from claim 1 and therefore defines patentably over Laakso et al. for at least the reasons set forth above with reference to claim 1.

In addition, claim 2 further limits claim 1 by requiring that the film comprise a plastic polymer. No such combination is taught or suggested by Laakso et al.

Claim 26 requires, among other features, a continuously movable wirefilm for electrically interconnecting bonding sites of said first component and said second component sites. No such feature is taught or suggested by Laakso et al. for reasons stated above with reference to claim 1.

Claim 26 further requires a plurality of spaced apart groups of wire strands, each group of said plurality of groups extending generally outwardly from a central region in a non-overlapping different direction, each wire strand of each group of wire strands having a first end and an opposing second end, the first end of each wire strand of each group of wire strands contacting a said first bonding site and the second end of each wire strand of said one of said groups of wire strands contacting a second bonding site to electrically interconnect the first component and the second component, each wire strand between the first end and the second end being embedded in said film. No such structure is taught or suggested by Laakso et al. either alone or in the combination as claimed.

Claims 21, 22, 29 and 30 were rejected under 35 U.S.C. 102(b) as being anticipated by Yamasaki et al. (U.S. 5,554,885). The rejection is respectfully traversed.

Claim 21 requires, among other features, a continuously movable substantially planar film. No such structure is taught or suggested by Yamasaki et al. The fact that

Yamasaki et al. has sprocket holes does not mean that the wirefilm movement is discontinuous as claimed. There is clearly no such teaching in Yamasaki et al.

Claim 21 further requires a plurality of spaced apart groups of wire strands, each group of said plurality of groups extending generally outwardly from a central region in a non-overlapping different direction, each wire strand of each group of wire strands having a first end and a second end, the first end of each wire strand of each group of wire strands operable to contact a said first bonding site and the second end of each wire strand of said one of said groups of wire strands operable to contact a said second bonding site to electrically interconnect the first component and the second component, each wire strand comprising a loop portion relaxed and located entirely between the first end and the second end, the loop portion spaced apart from said film. No such structure is taught or suggested by Yamasaki et al. Note that the resin 50 is an encapsulant. Accordingly, there is no discontinuous movability of the film in Yamasaki et al. and, it follows, there can be no loop portion spaced apart from the film. A bend is not a loop and the bend is clearly not "relaxed" meaning that there is reduced tension thereon (see page 10, lines 17ff). Also, the fact that a film has sprocket holes does not, ipso facto, mean that the movement of the film is discontinuous.

Claim 22 depends from claim 21 and therefore defines patentably over Yamasaki et al. for at least the reasons presented above with respect to claim 21.

In addition, claim 22 further limits claim 21 by requiring that the film comprise a plastic polymer. No such combination is taught or suggested by Yamasaki et al.

Claim 29 requires, among other features, a continuously movable substantially planar film. No such structure is taught or suggested by Yamasaki et al. for reasons stated above with reference to claim 21.

Claim 29 further requires a plurality of spaced apart groups of wire strands, each group of said plurality of groups extending generally outwardly from a central region in a non-overlapping different direction, each wire strand of each group of wire strands having a first end and a second end, the first end of each wire strand of said one of said groups of wire strands operable to contact a first bonding site and the second end of each wire strand of said one of said groups of wire strands operable to contact a second bonding site to electrically interconnect the first component and the second component, each wire strand comprising a loop portion relaxed and located entirely between the first end and the second end, the loop portion spaced apart from said film. The arguments presented above with reference to claim 21 apply as well to this claim.

Claim 30 depends from claim 29 and therefore defines patentably over Yamasaki et al. for at least the reasons presented above with reference to claim 29.

In addition, claim 30 further limits claim 29 by requiring that the film comprise a plastic polymer. No such combination is taught or suggested by Yamasaki et al.

Claims 4 and 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Laakso et al. in view of Nakano et al. The rejection is respectfully traversed.

Claim 4 depends from claim 1 and claim 27 depends from claim 26. Since Nakano et al. fails to overcome the deficiencies noted above with reference to claims 1 and 26, these claims define over the combination of references for that reason alone, even assuming *arguendo* that the combination be proper.

Claims 4 and 27 further limit claims 1 and 26 by requiring an adhesive layer operable to couple the wirefilm to the first component and the second component. No such combination is taught or suggested by Laakso et al., Nakano et al. or any proper combination of these references. It should be noted that this is not a bonding step, but rather an adhesive step to maintain proper orientation of the wire strands prior to bonding as discussed in the specification at page 10, lines 29ff.

Claims 24 and 32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yamasaki et al. in view of Nakano et al. The rejection is respectfully traversed.

Claim 24 depends from claim 21 and claim 32 depends from claim 29. Since Nakano et al. fails to overcome the deficiencies noted above with reference to claims 21 and 29, these claims define over the combination of references for that reason alone, even assuming *arguendo* that the combination be proper.

Claims 24 and 32 further limit claims 21 and 29 by requiring an adhesive layer operable to couple the wirefilm to the first component and the second component. No such combination is taught or suggested by Yamasaki et al., Nakano et al. or any proper combination of these references. It should be noted that this is not a bonding step, but rather an adhesive step to maintain proper orientation of the wire strands prior to bonding as discussed in the specification at page 10, lines 29ff.

Claims 6 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Laakso et al. in view of Ettre et al. (U.S. 3,655,496). The rejection is respectfully traversed.

Claim 6 depends from claim 1 and claim 28 depends from claim 26. Since Ettre et al. fails to overcome the deficiencies noted above with reference to claims 6 and 28,

these claims define over the combination of references for that reason alone, even assuming arguendo that the combination be proper.

Claims 6 and 28 further limit claim 1 and 26 by requiring a film tape carrier removably coupled to the film, the film tape carrier operable to advance the film from a first position to a second position. No such combination is taught or suggested by Laakso et al, Ettre et al. or any proper combination of these references.

Claims 25 and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Yamasaki et al. in view of Ettre et al. The rejection is respectfully traversed.

Claim 25 depends from claim 21 and claim 33 depends from claim 29. Since Ettre et al. fails to overcome the deficiencies noted above with reference to claims 21 and 29, these claims define over the combination of references for that reason alone, even assuming arguendo that the combination be proper.

In view of the above remarks and amendment, favorable reconsideration and allowance are respectfully requested.

Respectfully submitted,



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